

Red Dragon Port Talbot Externals

Lighting calculations are provided as a guide only.

Schemes are based upon the room dimensions and information issued by the Client. If a ceiling height is not provided then one will be estimated.

All dimensions and project information / requirements must be checked prior to order.

The Lighting Scheme has been designed to CIBSE guidelines where applicable. Standard reflectance levels used (70/50/20).

Lighting designs are carried out for estimation purposes only and UKLD accept no responsibility, and cannot be held liable for, any variances in light levels achieved. It is ultimately the responsibility of the installer to ensure the solution offered is suitable for the installation environment, and meets all of the requirements of the end user.

Where applicable, Emergency Lighting has been suggested in accordance with BS5266, EN1838 and EN50172.

It is the responsibility of the Purchaser/Installer, and not UKLD, to ensure that the design complies with local fire, health, and safety regulations. The emergency lighting must be checked and approved by a local fire control officer and approved by the building owner. In the event that the design is found not to comply, UKLD will adjust the design in consultation with the customer to ensure that it does comply with such regulations.

Any emergency lighting calculations included do not account for the location of critical emergency items, such as, but not limited to, plant or switch room task locations, reception telephone, first aid points, extinguisher points, call points, push bars, fire panels, etc. These areas may require higher risk lux levels under emergency conditions.

In the absence of a Fire Strategy plan, any exit signs specified have been done so based on assumptions regarding the shortest exit routes. These are estimations only and should be reviewed in full prior to any order. Responsibility for this lies with the Purchaser/Installer and the responsible person, or building owner, for the site. UKLD is not qualified to determine the structural and electrical appropriateness of their designs and is not responsible, and cannot be held liable for, any improper engineering, construction, rigging or handling methods, or for any improper use of structures or equipment that may be employed to realise the design.

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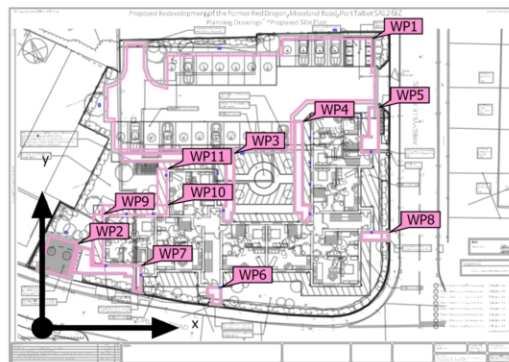
Luminaire list

Φ_{total} 38168 lm	P_{total} 259.0 W	Luminous efficacy 147.4 lm/W
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pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
17	JCC Lighting LTD	JC130010	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black	7.0 W	949 lm	135.5 lm/W
5	POWERLITE FITZGERALD LTD	VI3S-28-T4B-27K	VISAGE LED 3	28.0 W	4407 lm	157.4 lm/W

Site 1 (Light scene 1)

Calculation objects



Site 1 (Light scene 1)

Calculation objects

Working planes

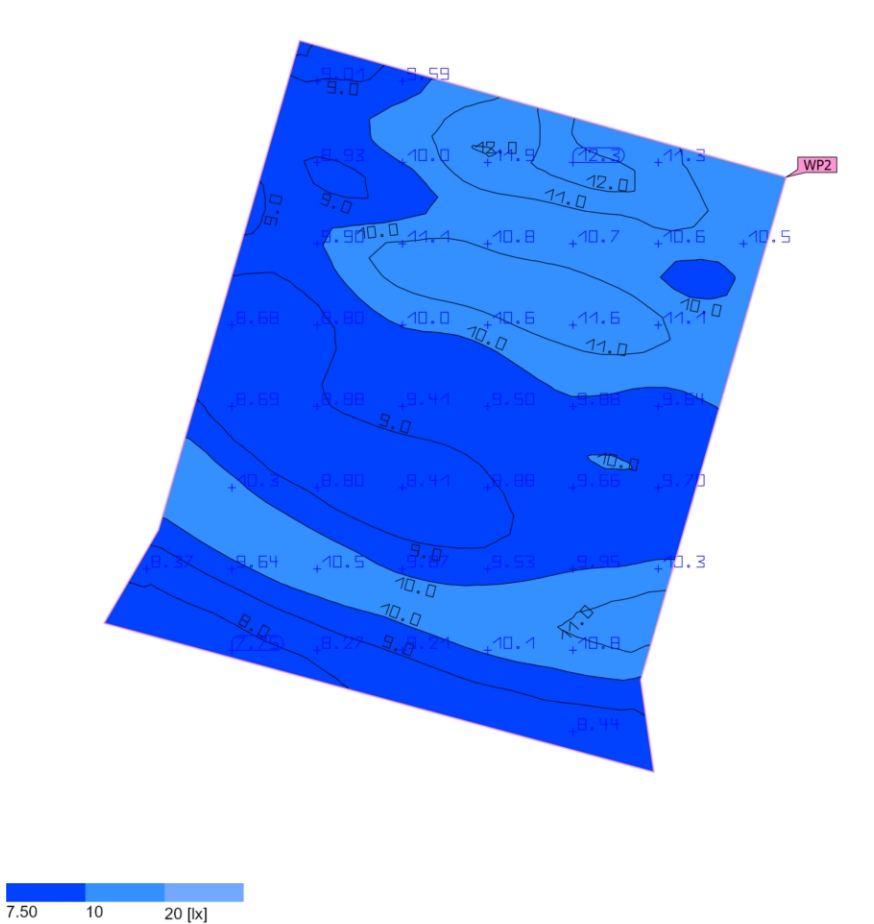
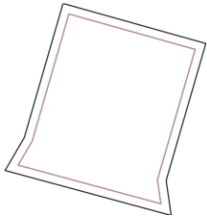
Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Working plane (21/22 Parking) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.300 m	9.84 lx	7.56 lx	12.3 lx	0.77	0.61	WP2
Working plane (Front Car Park) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.500 m	14.0 lx	6.73 lx	20.5 lx	0.48	0.33	WP1
Working plane (Outdoor space 10) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	30.7 lx	12.2 lx	51.8 lx	0.40	0.24	WP10
Working plane (Outdoor space 11) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	25.7 lx	10.8 lx	53.3 lx	0.42	0.20	WP11
Working plane (Outdoor space 3) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	18.8 lx	8.62 lx	51.4 lx	0.46	0.17	WP3
Working plane (Outdoor space 4) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	25.1 lx	11.1 lx	47.6 lx	0.44	0.23	WP4
Working plane (Outdoor space 5) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	22.5 lx	11.2 lx	47.1 lx	0.50	0.24	WP5
Working plane (Outdoor space 6) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	23.4 lx	7.79 lx	46.2 lx	0.33	0.17	WP6
Working plane (Outdoor space 7) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	23.0 lx	9.62 lx	54.6 lx	0.42	0.18	WP7
Working plane (Outdoor space 8) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	26.6 lx	7.43 lx	45.9 lx	0.28	0.16	WP8
Working plane (Outdoor space 9) Perpendicular illuminance (adaptive) Height (Space): 0.000 m, Height (Site): 0.010 m, Wall zone: 0.000 m	26.6 lx	13.3 lx	51.1 lx	0.50	0.26	WP9

Site 1 (Light scene 1)

Calculation objects

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

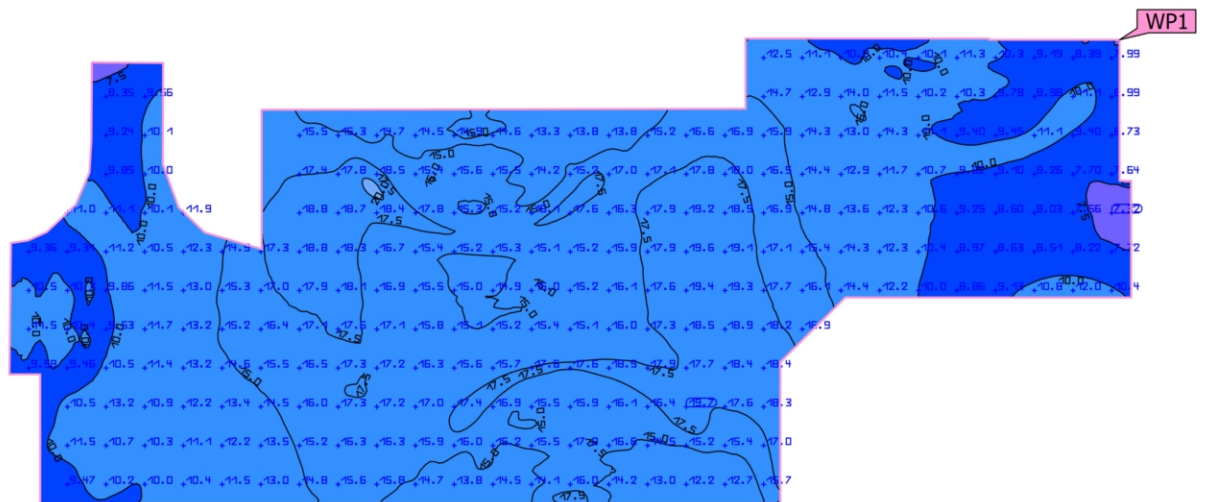
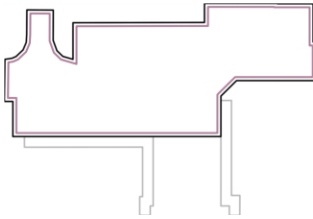
21/22 Parking (Light scene 1)

Working plane (21/22 Parking)

Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Working plane (21/22 Parking) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.300 m	9.84 lx	7.56 lx	12.3 lx	0.77	0.61	WP2

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

Front Car Park (Light scene 1)

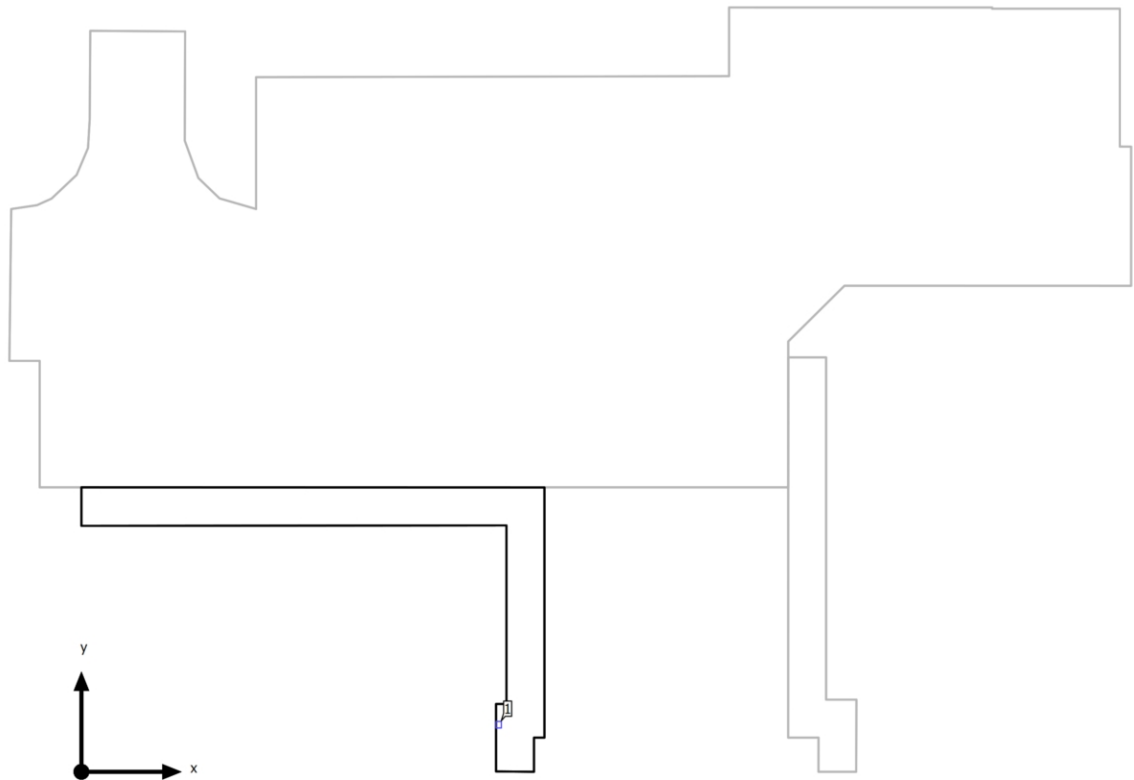
Working plane (Front Car Park)

Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Working plane (Front Car Park)	14.0 lx	6.73 lx	20.5 lx	0.48	0.33	WP1
Perpendicular illuminance (adaptive)						
Height: 0.000 m, Wall zone: 0.500 m						

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

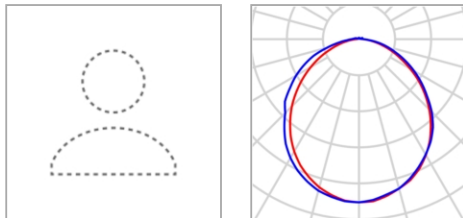
Outdoor space 3

Luminaire layout plan



Outdoor space 3

Luminaire layout plan

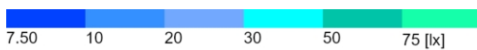
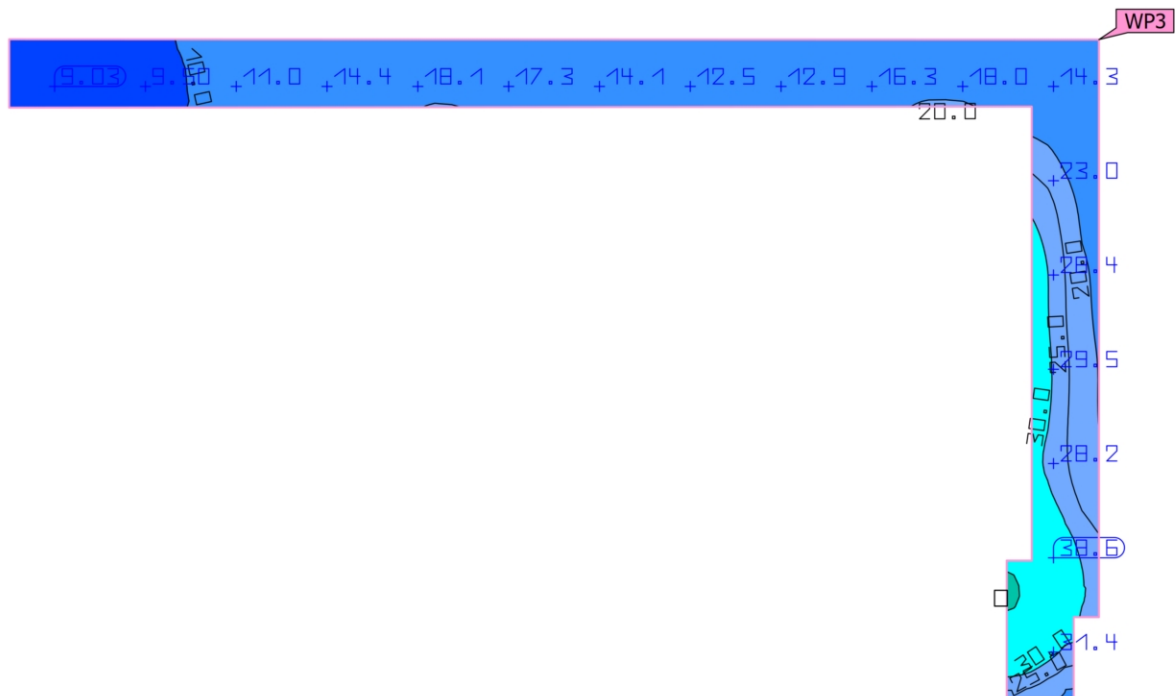
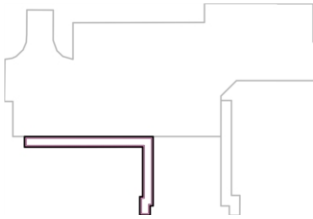


Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
16.498 m	1.861 m	2.500 m	1

Outdoor space 3 (Light scene 1)

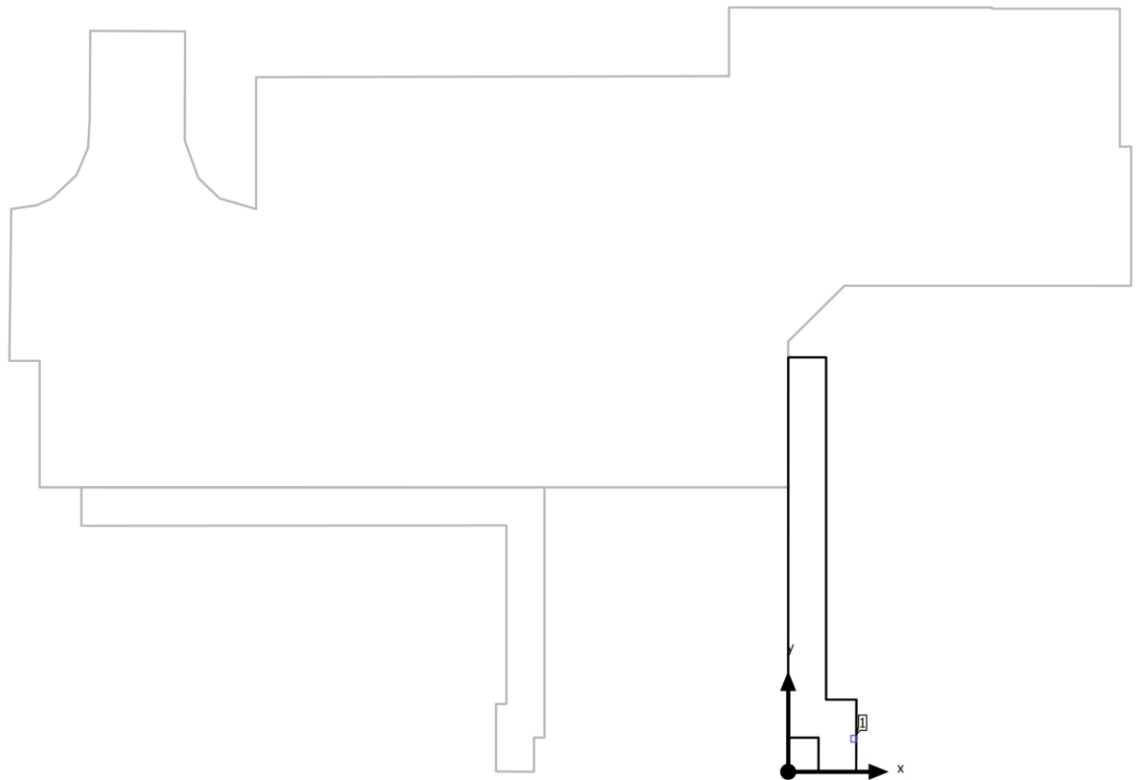
Working plane (Outdoor space 3)

Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 3) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	18.8 lx	8.62 lx	51.4 lx	0.46	0.17	WP3

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

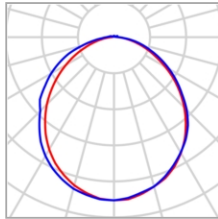
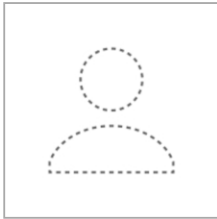
Outdoor space 4

Luminaire layout plan



Outdoor space 4

Luminaire layout plan



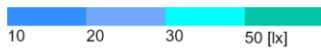
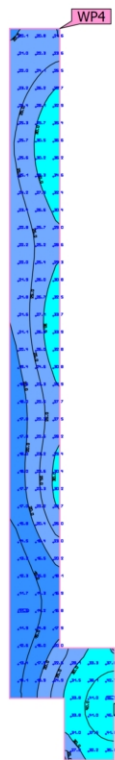
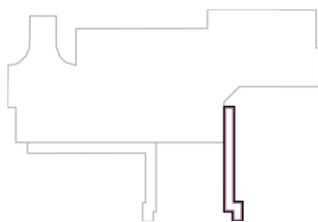
Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
2.589 m	1.306 m	2.500 m	1

Outdoor space 4 (Light scene 1)

Working plane (Outdoor space 4)

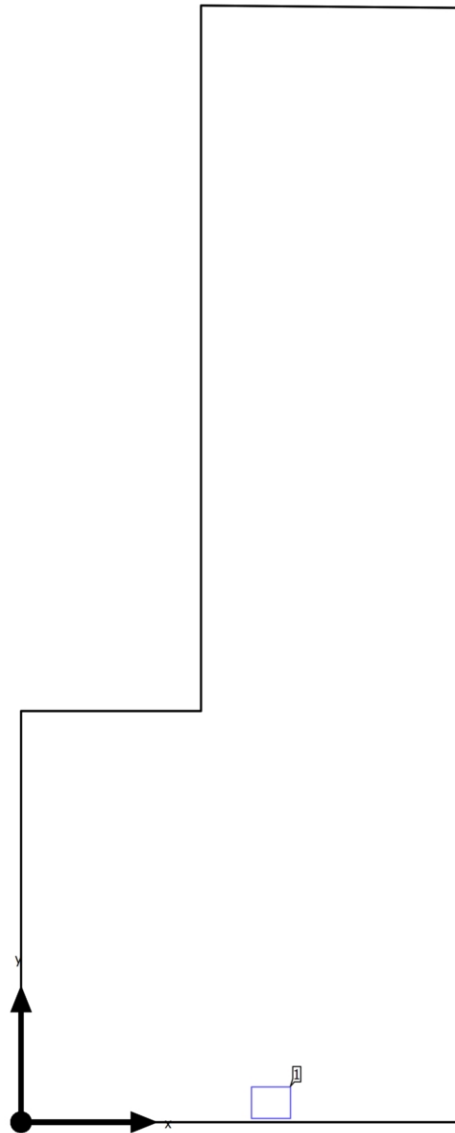


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 4) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	25.1 lx	11.1 lx	47.6 lx	0.44	0.23	WP4

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

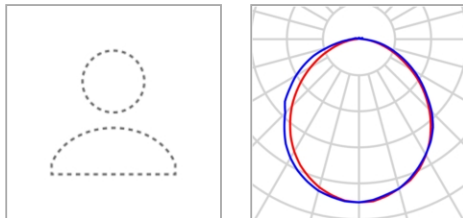
Outdoor space 5

Luminaire layout plan



Outdoor space 5

Luminaire layout plan

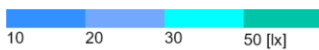
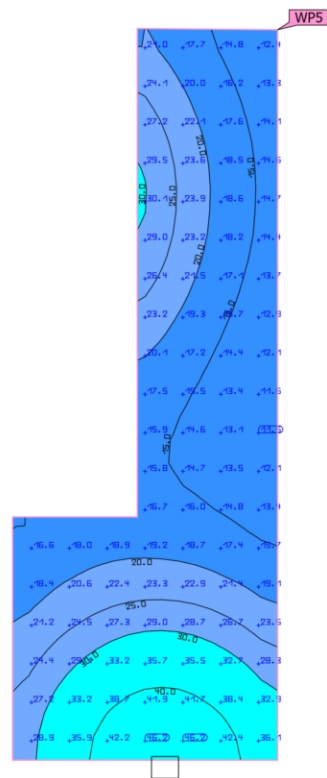
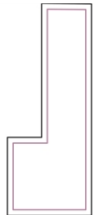


Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
1.667 m	0.130 m	2.500 m	1

Outdoor space 5 (Light scene 1)

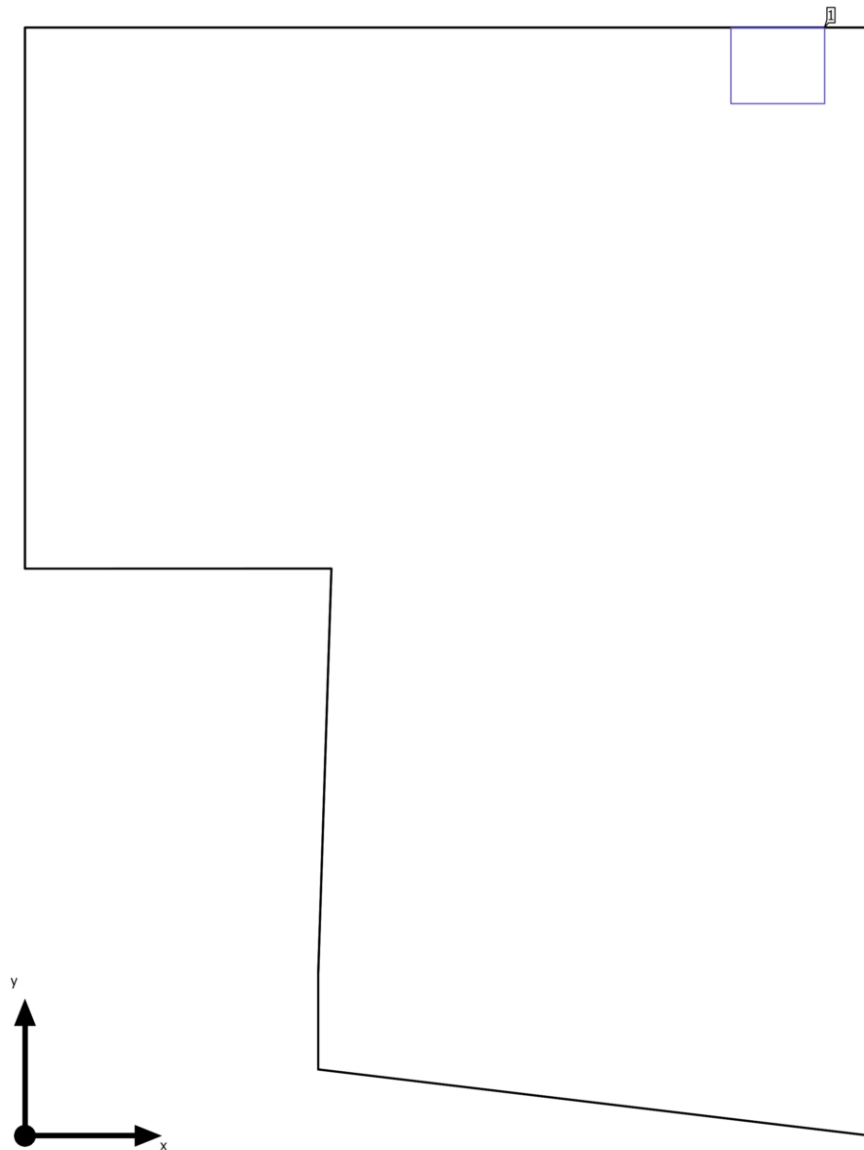
Working plane (Outdoor space 5)

Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 5)	22.5 lx	11.2 lx	47.1 lx	0.50	0.24	WP5
Perpendicular illuminance (adaptive)						
Height: 0.000 m, Wall zone: 0.200 m						

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

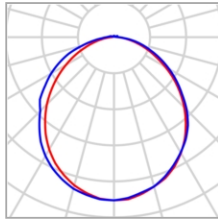
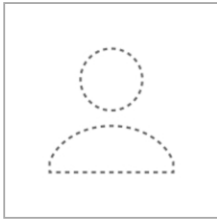
Outdoor space 6

Luminaire layout plan



Outdoor space 6

Luminaire layout plan



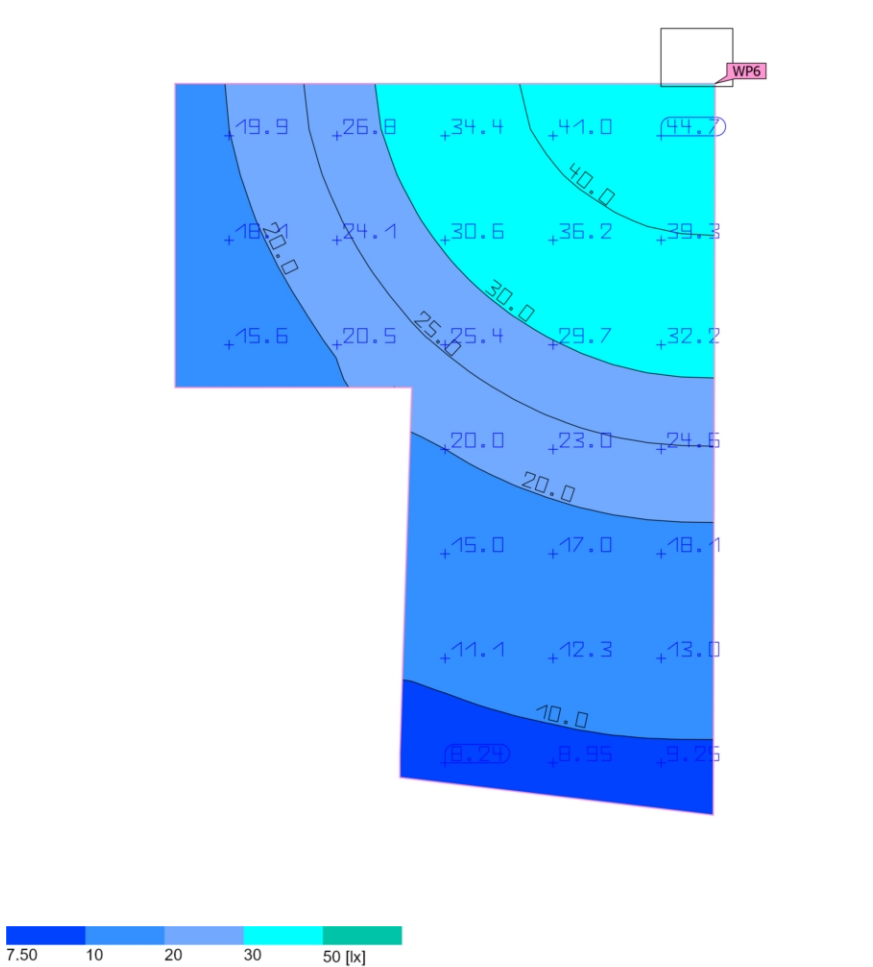
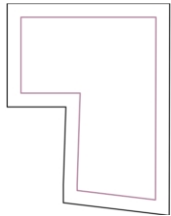
Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
2.088 m	2.965 m	2.500 m	1

Outdoor space 6 (Light scene 1)

Working plane (Outdoor space 6)

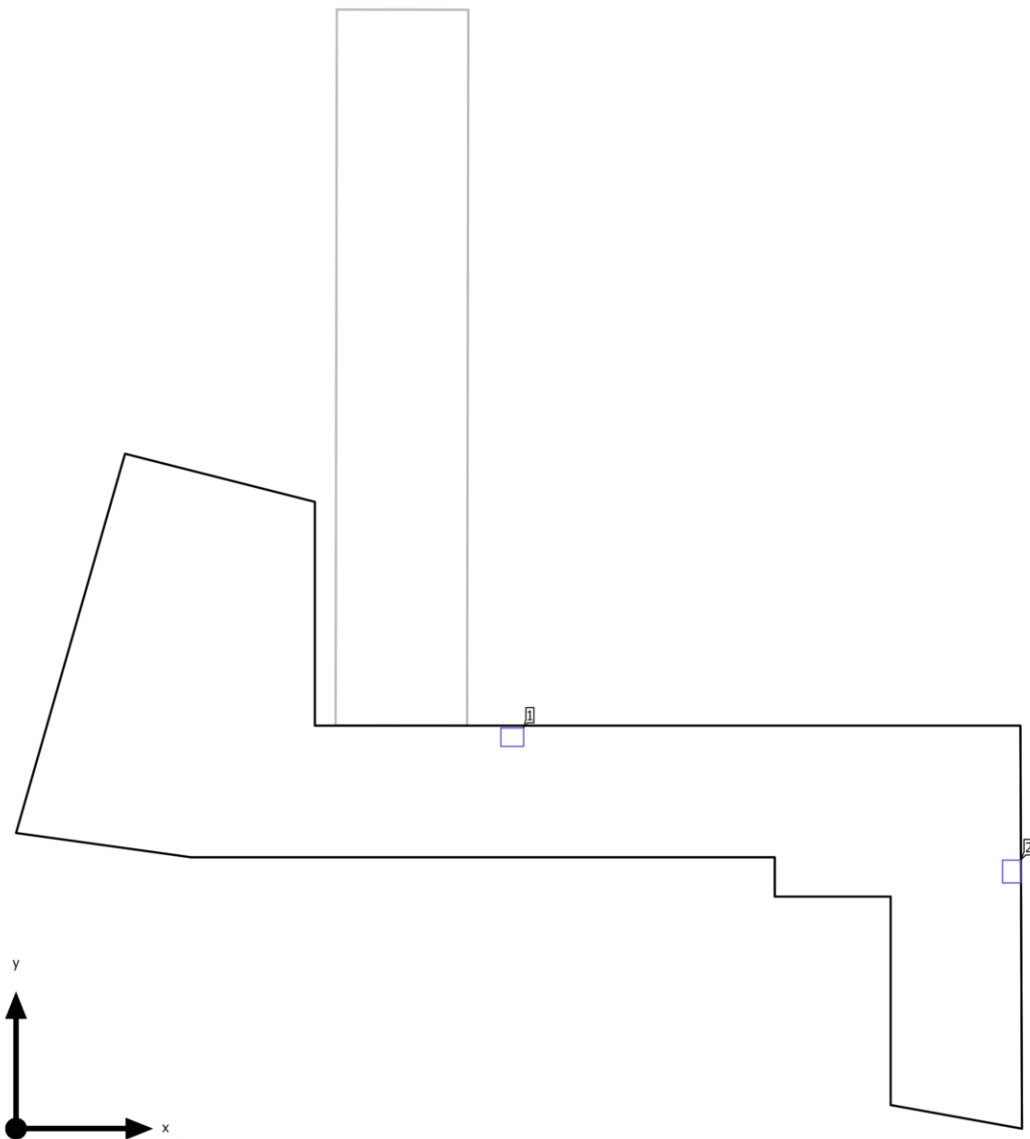


Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 6)	23.4 lx	7.79 lx	46.2 lx	0.33	0.17	WP6
Perpendicular illuminance (adaptive)						
Height: 0.000 m, Wall zone: 0.200 m						

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

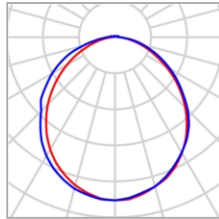
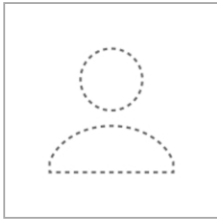
Outdoor space 7

Luminaire layout plan



Outdoor space 7

Luminaire layout plan

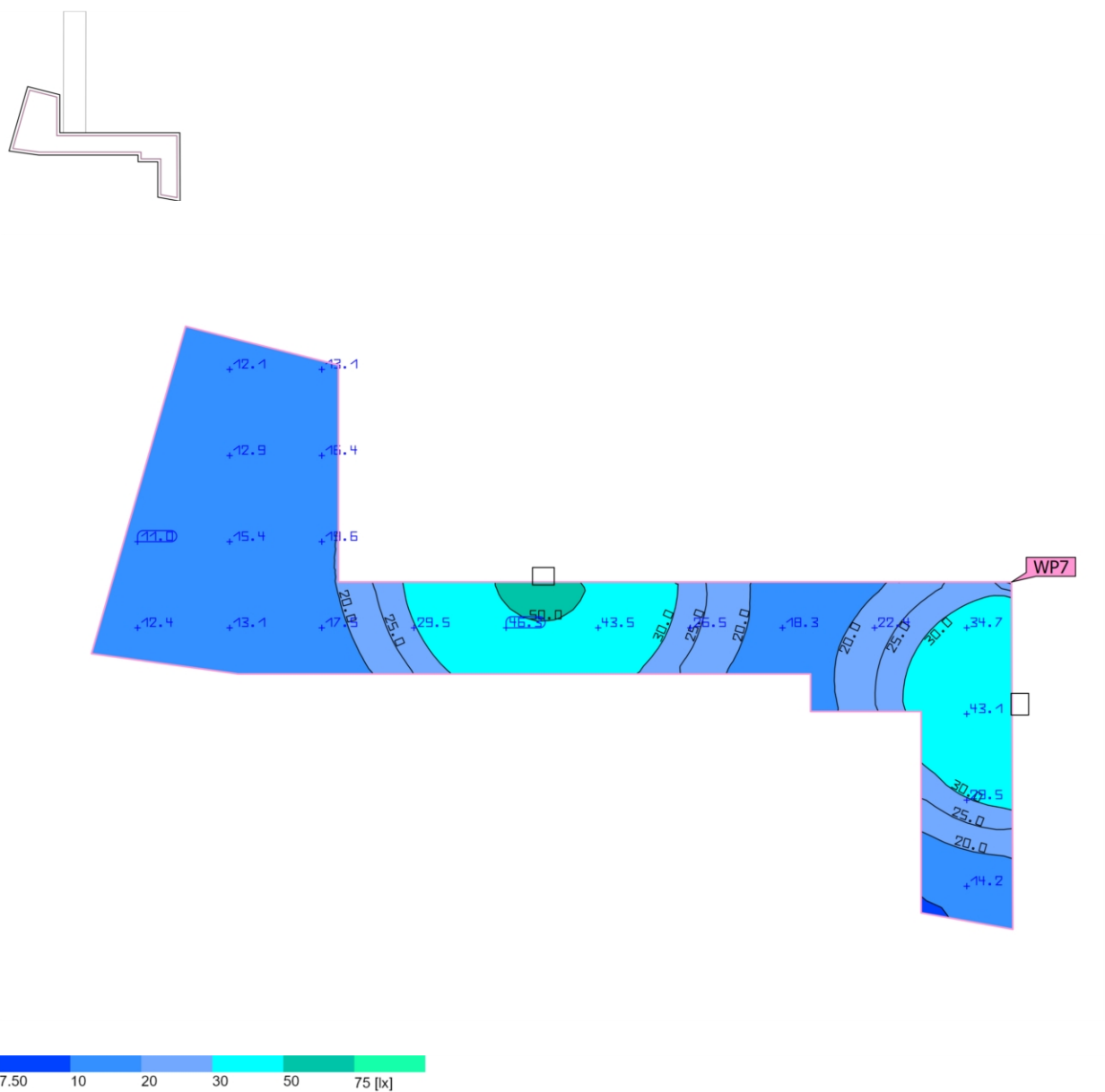


Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
5.659 m	4.461 m	2.500 m	1
11.356 m	2.931 m	2.500 m	2

Outdoor space 7 (Light scene 1)
Working plane (Outdoor space 7)

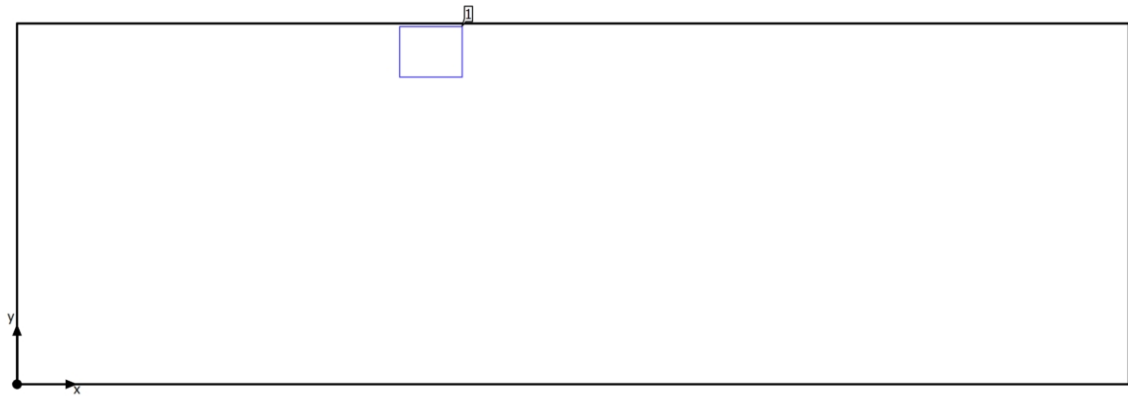


Properties	$\bar{E}$	E_{min}	E_{max}	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 7) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.200 m	23.0 lx	9.62 lx	54.6 lx	0.42	0.18	WP7

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

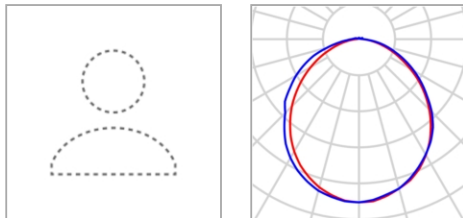
Outdoor space 8

Luminaire layout plan



Outdoor space 8

Luminaire layout plan



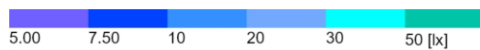
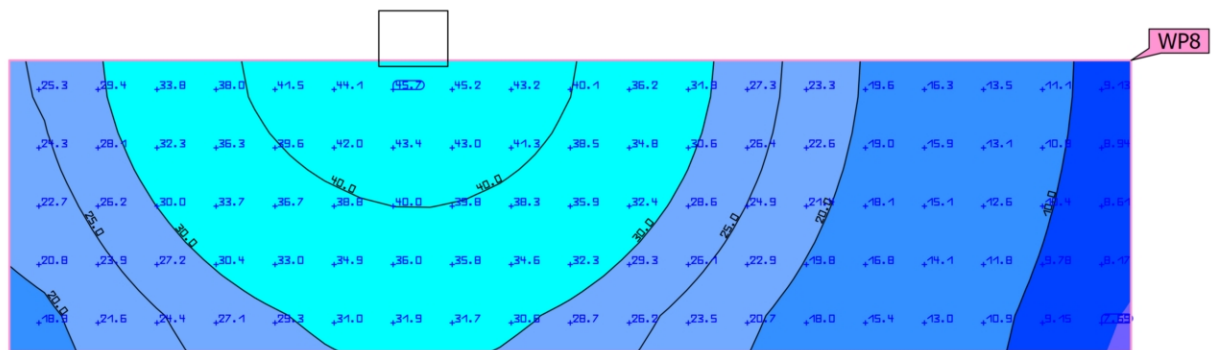
Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
1.721 m	1.382 m	2.500 m	1

Outdoor space 8 (Light scene 1)

Working plane (Outdoor space 8)

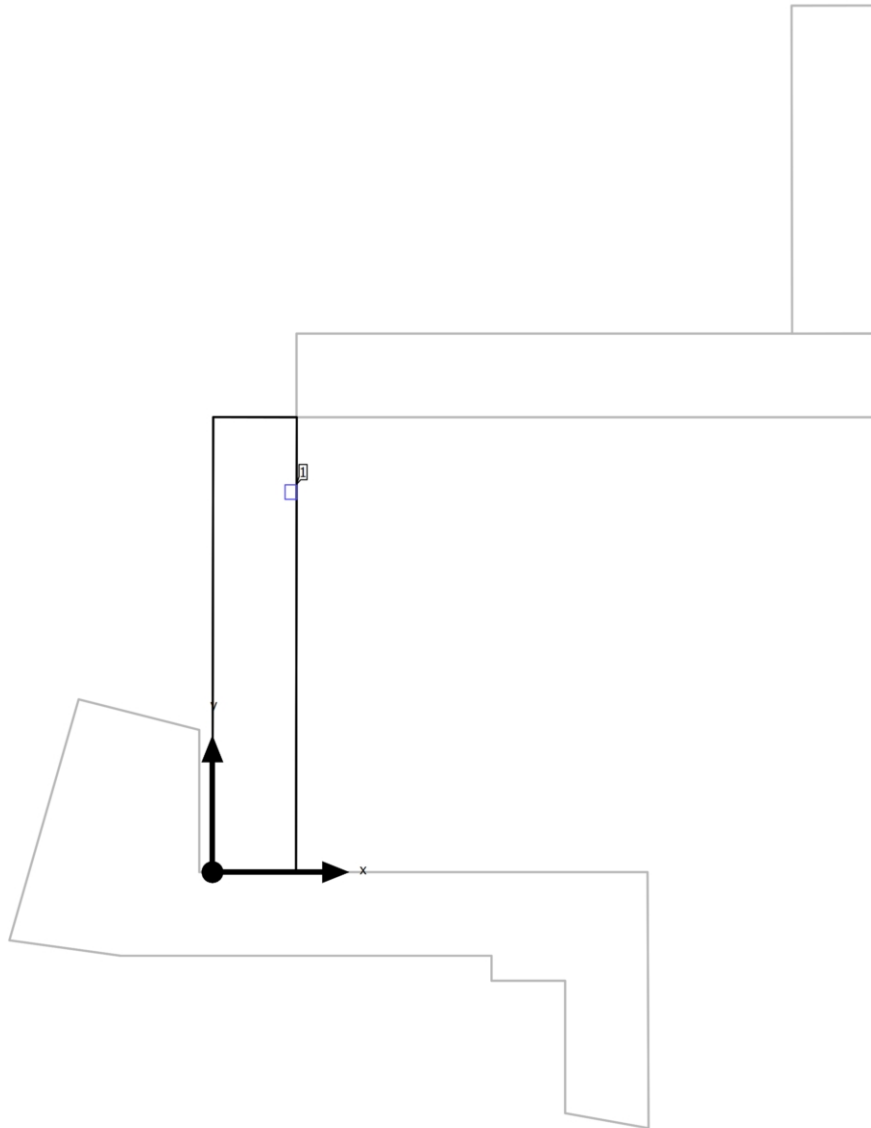


Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 8)	26.6 lx	7.43 lx	45.9 lx	0.28	0.16	WP8
Perpendicular illuminance (adaptive)						
Height: 0.000 m, Wall zone: 0.200 m						

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

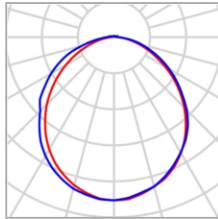
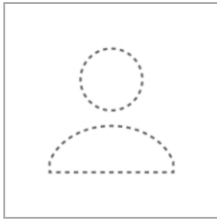
Outdoor space 9

Luminaire layout plan



Outdoor space 9

Luminaire layout plan

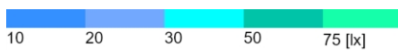
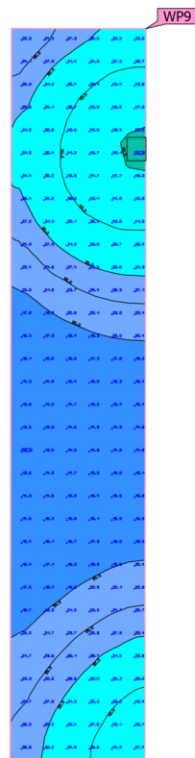
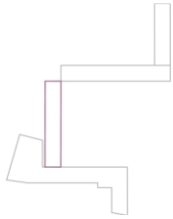


Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
1.409 m	6.816 m	2.490 m	1

Outdoor space 9 (Light scene 1)

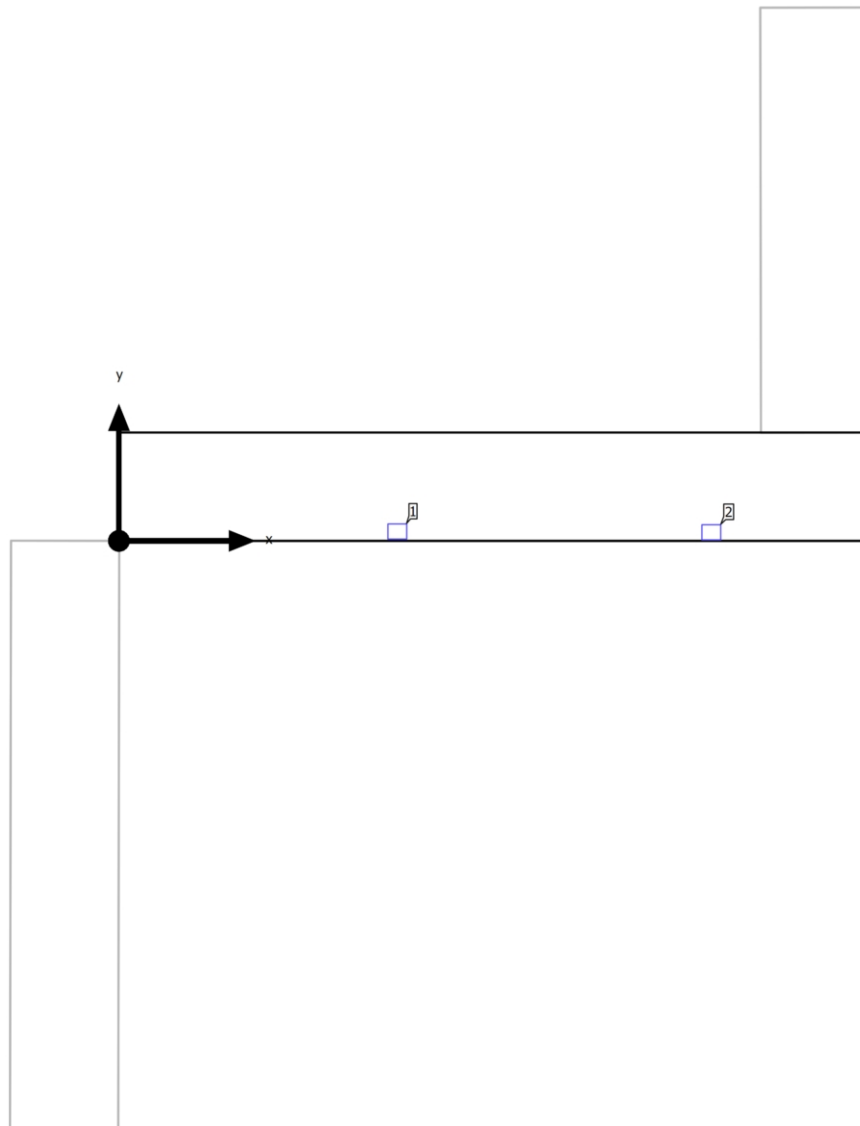
Working plane (Outdoor space 9)

Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 9) Perpendicular illuminance (adaptive) Height: 0.000 m, Wall zone: 0.000 m	26.6 lx	13.3 lx	51.1 lx	0.50	0.26	WP9

Utilisation profile: DIALux presetting (5.1.4 Standard (outdoor transportation area))

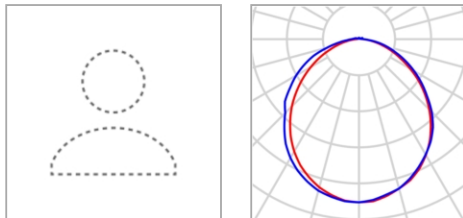
Outdoor space 10

Luminaire layout plan



Outdoor space 10

Luminaire layout plan

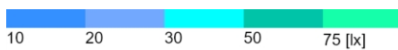
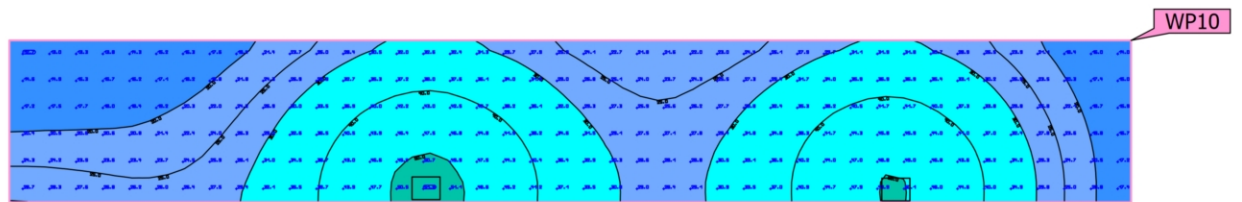
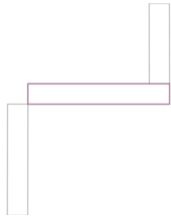


Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
3.858 m	0.130 m	2.500 m	1
8.208 m	0.118 m	2.500 m	2

Outdoor space 10 (Light scene 1)

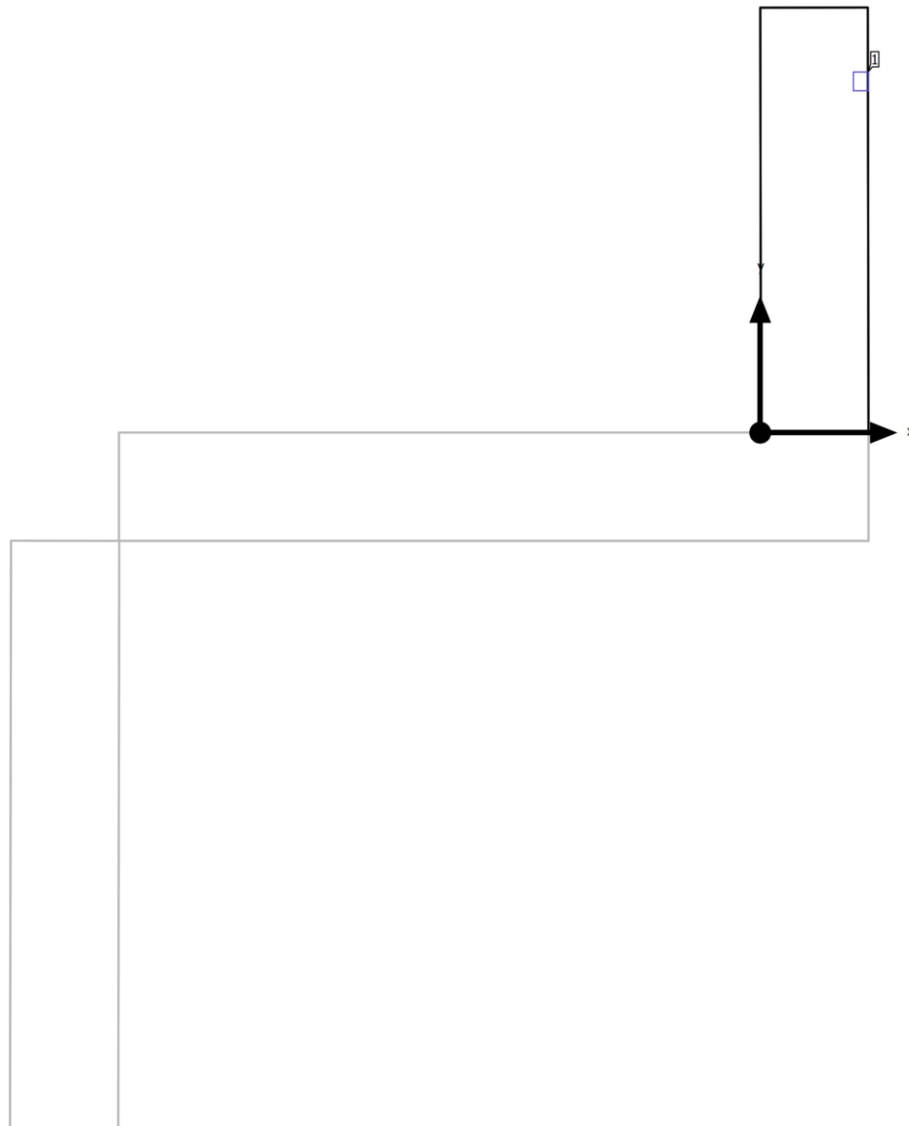
Working plane (Outdoor space 10)

Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 10)	30.7 lx	12.2 lx	51.8 lx	0.40	0.24	WP10
Perpendicular illuminance (adaptive)						
Height: 0.000 m, Wall zone: 0.000 m						

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))

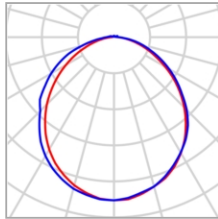
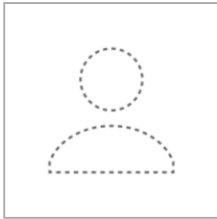
Outdoor space 11

Luminaire layout plan



Outdoor space 11

Luminaire layout plan

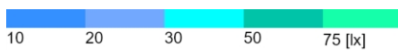
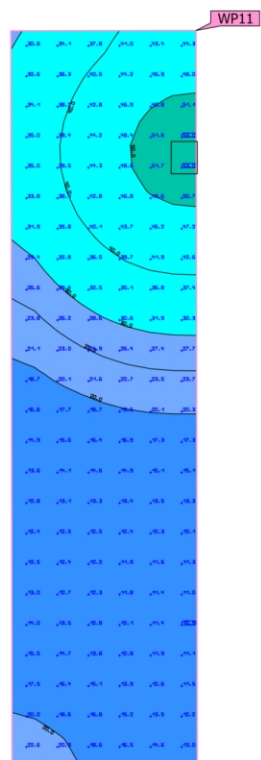
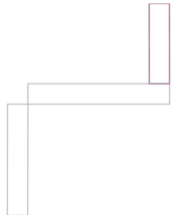


Manufacturer	JCC Lighting LTD	P	7.0 W
Article No.	JC130010	$\Phi_{\text{Luminaire}}$	949 lm
Article name	Novium LED Wall Pack 7/8/10/12W IP65 IK10 3000/4000K Black		
Fitting	1x LED		

Individual luminaires

X	Y	Mounting height	Luminaire
1.395 m	4.863 m	2.500 m	1

Outdoor space 11 (Light scene 1)

Working plane (Outdoor space 11)

Properties	$\bar{E}$	$E_{\min}$	$E_{\max}$	$U_o (g_1)$	g_2	Index
Working plane (Outdoor space 11)	25.7 lx	10.8 lx	53.3 lx	0.42	0.20	WP11
Perpendicular illuminance (adaptive)						
Height: 0.000 m, Wall zone: 0.000 m						

Utilisation profile: DIALux presetting (5.1.4-Standard (outdoor transportation area))